REMARKS

This application has been carefully reviewed in light of the Office Action mailed September 6, 2005. Claims 1-28 are pending in the Application. Applicants respectfully request reconsideration and favorable action of all pending claims in view of the following remarks.

Section 102 Rejections

The Office Action rejects Claims 1-15 and 20-26 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,249,249 to Obayashi et al ("*Obayashi*"), and Claims 16-19 and 27-28 are rejected in the Office Action under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,091,941 to Moriyama et al. ("*Moriyama*"). Applicants respectfully traverse.

Claim 1 recites in part, "a first section which outputs first and second digital signals . . . ," a "digital analog converter which converts said first and second digital signals into first and second analog signals" and a phase shift section which . . . impart[s] to said first analog signal [a particular phase shift] and . . . impart[s] to said second analog signal [another particular phase shift], which is not shown by *Obayashi*. The Office Action states that element 113 (or 113b or 213) is the first section that outputs the first and second digital signals, element 122 (or 123 or 232) is the digital analog converter that converts the first and second digital signals output by the first section into first and second analog signals, and element 125 (including 141) is the phase shift section that imparts phase shifts to the first and second analog signals produced by the digital analog converter. Office Action at 2-3. This is simply incorrect.

Referring to Figure 1 of *Obayashi*, the outputs of element 113 is what the Office Action contends are the first and second digital signals that are then converted to analog form and then phase shifted. But these are analog, not digital signals, as can be determined by careful review of Figure 2 and the associated description. Further, element 122 (asserted to be the claimed DAC) does not convert the outputs of element 113 into analog form. Rather, element 122, which is a part of element 113, as shown in Figure 2, converts a phase shift control signal from digital to analog form; it does not convert to analog form what the Office Action contends are the first and second digital signals (the

output of element 113). In addition, element 125 (asserted to be the claimed phase shift section) does not impart phase shifts to first and second analog signals produced from the output of element 113. Rather, element 125, which is part of element 113 as shown in Figure 2, shifts a phase of a different signal – "a carrier wave frequency local signal supplied from local signal generator 111." For at least these reasons, the rejection of Claim 1 is improper, but there is more.

Claim 1 also recites that the phase shift section imparts to the first and second analog signals phase shifts that are each substantially equal and opposite to respective phase shifts imparted to the first and second digital signals output by the claimed first section, with the first and second digital signals representing specific waveforms with their own phase shifts. *Obayashi* is completely devoid of any teaching of imparting such phase shifts. Indeed the Office Action fails to particularly identify any teaching in *Obayashi* disclosing imparting such substantially equal and opposite phase shifts.

For at least these reasons, Claim 1 is allowable as are all claims depending therefrom. Claim 20 is allowable for analogous reasons, as are all claims depending therefrom. Reconsideration and favorable action are requested.

Claim 23 recites:

> generating a digital signal having a plurality of successive states; and
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> converting said digital signal into an analog signal, including generating for each said state of said digital signal a respective corresponding analog pulse which has a duration less than the duration of the corresponding state, and outputting a predetermined voltage between successive said pulses.

Obayashi does not disclose this combination of limitations. For example, Obayeshi is devoid of any mention of "converting said digital signal into an analog signal, including generating for each said state of said digital signal a respective corresponding analog pulse which has a duration less than the duration of the corresponding state, and outputting a predetermined voltage between successive said pulses." Indeed, the Office Action does not even contend that this limitation is met by *Obayeshi* (*See* treatment of Claim 23 at pages 2-3 of Office Action). For at least this reason, Claim 23 is allowable, as are all claims depending therefrom. Claim 7 is allowable for analogous reason, as are all claims depending therefrom. Favorable action is requested.

Claim 16 recites:

> An apparatus, comprising:
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> a first section which outputs first and second analog signals, said first analog signal representing a predetermined waveform and said second analog signal representing substantially said predetermined waveform;
>
> a first phase shift section which produces a first shifted signal by imparting to said first analog signal a first phase shift, and which produces a second shifted signal by imparting to said second analog signal a second phase shift different from said first phase shift;
>
> an analog-to-digital converter section which converts said first and second shifted signals respectively into first and second digital signals;
>
> a further phase shift section which produces a first adjusted signal by imparting to said first digital signal a phase shift which is substantially equal and opposite to said first phase shift, and which produces a second adjusted signal by imparting to said second digital signal a phase shift which is substantially equal and opposite to said second phase shift; and
>
> a second section operable to facilitate combining of said first and second adjusted signals.

Moriyama does not show this combination of limitations. For example, the Office Action asserts the claimed "first section which outputs first and second analog signals" is met by phase shifter 138, but this is clearly incorrect. Phase shifter 138 does not output first and second analog signals with the claimed relationship. *See* Col. 14, lines 49-57. The Office Action also asserts that phase shifter 138 meets the claimed first phase shift section, but this is incorrect because phase shifter 138 does not impart phase shifts to the claimed first and second analog signals. Rather it imparts a single phase shift. The Office Action also asserts that element 113 (or 24) constitutes the claimed "further phase shift section," but this is clearly incorrect. Element 113 (and 24) is an arithmetic control unit that "compares the amplitude of the feedback baseband signal" and "the amplitude of the transmission baseband signal." There is simply no disclosure in *Moriyama* of "imparting to said first digital signal a phase shift which is substantially equal and opposite to said first phase shift, and which produces a second adjusted signal by imparting to said second digital signal a phase shift

which is substantially equal and opposite to said second phase shift," as claimed, nor has the Office Action specifically identified such a teaching in *Moriyama*.

For at least these reasons, Claim 16 is allowable, as are all claims depending therefrom. Claims 27 and 28 are allowable for analogous reasons.

CONCLUSION

Applicants have now made an earnest attempt to place this case in condition for immediate allowance. For the foregoing reasons and for other apparent reasons, Applicants respectfully request allowance of all pending claims.

If the Examiner feels that prosecution of the present Application may be advanced in any way by a telephone conference, the Examiner is invited to contact the undersigned attorney at 214-953-6447.

Applicants do not believe that any fees are due. However, the Commissioner is hereby authorized to charge any required fees and credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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